study this beetle believe that this species lives in many types of habitat, with some preference for grasslands and open understory oak-hickory forests. Appropriate habitats exist within the state today, but few areas in Alabama have been surveyed for this species. Although the American burying beetle is currently receiving attention from a number of researchers, the cause for the decline of the American burying beetle has not yet been determined. It may be a result of habitat fragmentation, habitat loss, carcass limitation, pesticides, disease, light pollution, or a combination of these factors. Since carrion availability determines success at raising the young, carrion may be the greatest factor determining where the species can survive.

During the 1990s, small populations were located at isolated sites in five states along the westernmost boundary of the former range: Arkansas, Oklahoma, Kansas, Nebraska, and South Dakota. A population was also located on an island off the coast of Rhode Island. Surveys are taking place in other areas as well and re-establishment efforts are taking place in Massachusetts and Ohio. Although there are no recent records from Alabama, it is hoped that one day the American burying beetle may again be found in Alabama's forests.

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Landowner Sees Benefit of Planting Genetically Improved Seedlings

By TILDA MIMS, Education Specialist, Alabama Forestry Commission

WHEN it comes to ordering pine seedlings, the menu of choices can be overwhelming. The terms "1st Generation," "2nd Generation" and "Genetically Enhanced" may be confusing, and when you toss in the difference in their prices, the decision can become even harder.

Like many TREASURE Forest landowners, Dr. John Mims of Colbert County likes to experiment with forest management to see what he can learn. His experiment with the Forestry Commission's genetically improved seedlings taught him that, in some cases, the extra expense of these seedlings, sometimes called "super trees," is easily worthwhile.

In 1989, Dr. Mims planted 100 acres of AFC Second Generation loblolly pine in marginal cropland on Hawk Pride Mountain in the middle of Colbert County. At the same time, he tried regular seedlings on better soil.

The seedlings went through an ice storm in 1993 and a second severe storm in 1998. By the last storm, the trees were large enough to salvage by thinning for pulpwood. At 8 to 10 inches in diameter, the trees brought $312 per acre when cutting every fifth row and the storm-damaged trees. Regular seedlings planted on better soil had not grown as well in the same length of time.

Dr. Mims believes the difference was in the genetics of the improved seedlings. "We also had about 5 acres of 15-year-old pines harvested at the same time. They were taller and heavier but no bigger around. We got just about the same amount of money for each," he said. "We got in 10 years what you normally get in 15." Champion Paper Company did the thinning and, according to Dr. Mims, they think it will be ready to thin again in 5 to 6 years.

He warns other landowners to look at each individual tract and consult with a forestry expert about thinning early. For most landowners, thinning at 10 years would be premature. "This was a special situation when all the trees were growing like mad, and in the areas with genetically enhanced trees, the growth was amazing."

Many of forestry's success stories have been the result of one person's desire to push the limits of the routine and to do just a little bit more than expected. As Dr. Mims starts a new project to test planting methods to protect trees from severe ice storms, we can all be grateful that this TREASURE Forest is taking the education aspect of multiple-use forest management to the next level.

Terms to Understand

1st Generation (cycle)-These seedlings are grown from seed collected from grafted orchards. These orchards are established using selected high performance parent trees from variable natural stands. These seedlings are often referred to as "improved" pine seedlings.

1.5 Generation (cycle)-These seedlings are grown from seed collected from grafted orchards which have been established using the best performing parents from 1st cycle orchards.

2nd Generation (cycle)-These seedlings are grown from seed collected from grafted orchards using the best performing crosses and/or parents from first cycle orchards based on progeny test data.